The California Department of State Hospitals

COVID-19 Transmission-Based Precautions and Testing

August 2020

Update approved by the DSH Executive Team on December 31, 2020

Contents

The guidelines and protocols included in this document were developed in partnership between DSH and the California Department of Public Health, Healthcare Associated Infections (HAI) Program to provide guidelines for COVID-19 transmission-based precautions and testing. These guidelines represent current best practices and may require regular updates. These are the minimum requirements. Each hospital develops local operating procedures to support these protocols based on their resources, staffing and physical plant layout. Local Public Health Department collaboration is highly encouraged to further support these State protocols.

Definitions

Admission Observation Unit (AOU): Houses patients arriving to the hospital for admission and in certain circumstances patients arriving from receiving outside care/services. Patients are isolated and tested for 14 days. CDC defines this prevention measure as Routine Intake Quarantine.

COVID-19 (SARS CoV-2 Virus) Positive Individual: Patient or staff who has tested positive for the SARS CoV-2 virus using a reverse transcriptase polymerase chain reaction amplification test (RT-PCR or PCR). All positive test results by antigen testing must be confirmed by PCR.

Healthcare Personnel (HCP): All paid and unpaid persons serving in healthcare settings who have the potential for direct or indirect exposure to patients or infectious materials, including body substances (e.g., blood, tissue, and specific body fluids); contaminated medical supplies, devices, and equipment; contaminated environmental surfaces; or contaminated air.

Isolation Area: Separates patients who refuse testing from those that are under serial testing. Isolation areas may be in a home unit or any specified locations within each hospital.

Isolation Unit: Separates confirmed COVID-19 (+) patients from people who are not infected.

Persons Under Investigation (PUI) Unit/Rooms: Separates patients in individual rooms that have symptoms consistent with COVID-19 disease who are not confirmed to be infected.

Personal Protective Equipment (PPE): Refers to protective clothing, helmets, gloves, face shields, goggles, surgical masks and/or respirators or other equipment designed to protect the wearer from injury or the spread of infection or illness, and chemical and biological hazards.

Quarantine Unit: Houses asymptomatic patients that have been exposed to a patient or an HCP (either assigned to the unit or visiting) that is suspected (PUI) or confirmed with COVID-19 infection. A Quarantine Unit is activated when patients are exposed to a confirmed or suspected COVID-19 patient or HCP.

Transmission-Based Precautions: The second tier of basic infection control and are to be used in addition to Standard Precautions for patients who may be infected or colonized with certain infectious agents for which additional precautions are needed to prevent infection transmission. Contact Precautions: Precautions for patients with known or suspected infections that represent an increased risk for contact transmission. Examples include COVID-19, MRSA, VRE, diarrheal illnesses, open wounds and RSV.

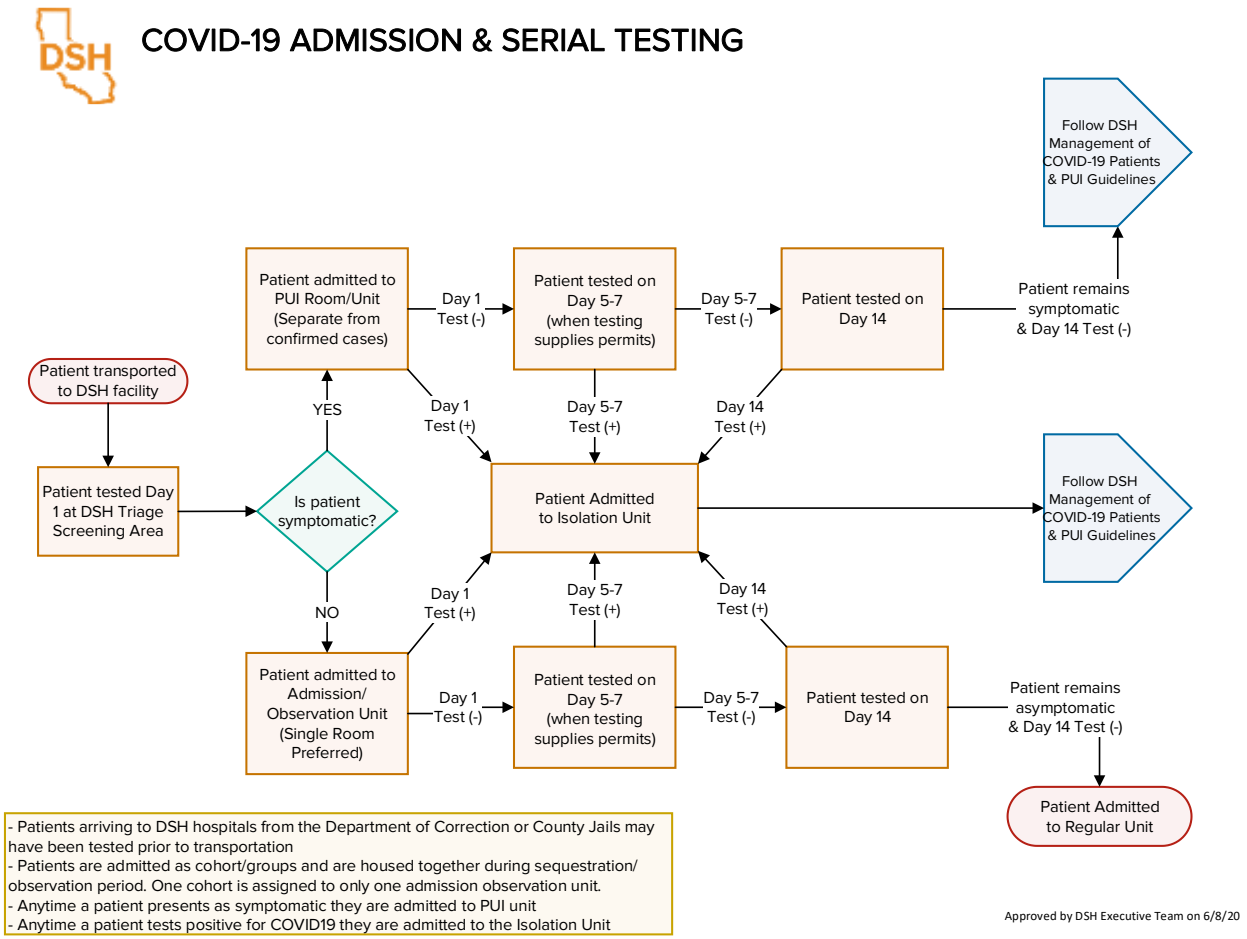
I. Admission Testing

All patients that arrive for admission to a DSH hospital undergo COVID-19 RNA testing and are housed when possible as a cohort in an Admission Observation Unit (AOU) where they are separated from the rest of the hospital. The patients are tested at day 1, 7, and 14. If all three tests are negative, the patient can be moved to be housed in a regular unit. If any of the three tests returns positive the patient is immediately moved to an isolation unit and the cohort testing schedule resets to day 1. If the following sequential two tests are negative, the patient can then be moved to be housed in a regular unit. Isolation units house confirmed COVID-19 patients. While housed in an AOU, if the patient develops symptoms consistent with COVID-19 disease, they are immediately moved to a patient under investigation (PUI) room where the patient is isolated and undergoes testing. DSH Management of COVID-19 Patients and PUI contains detailed instructions on the what actions to take if a patient is suspected or is confirmed to have COVID-19.

Table 1. PPE Required in Admission Observation Units

REQUIRED PPE	REQUIRED PPE WHEN PROVIDING PATIENT CARE (LESS THAN 6 FEET APART)	AVAILABLE UPON REQUEST
• Surgical mask • Face Shield	• N-95 Respirator • Face Shield • Gloves	• Gown

Figure 1. COVID-19 Admission & Serial Testing



II. Quarantine Testing

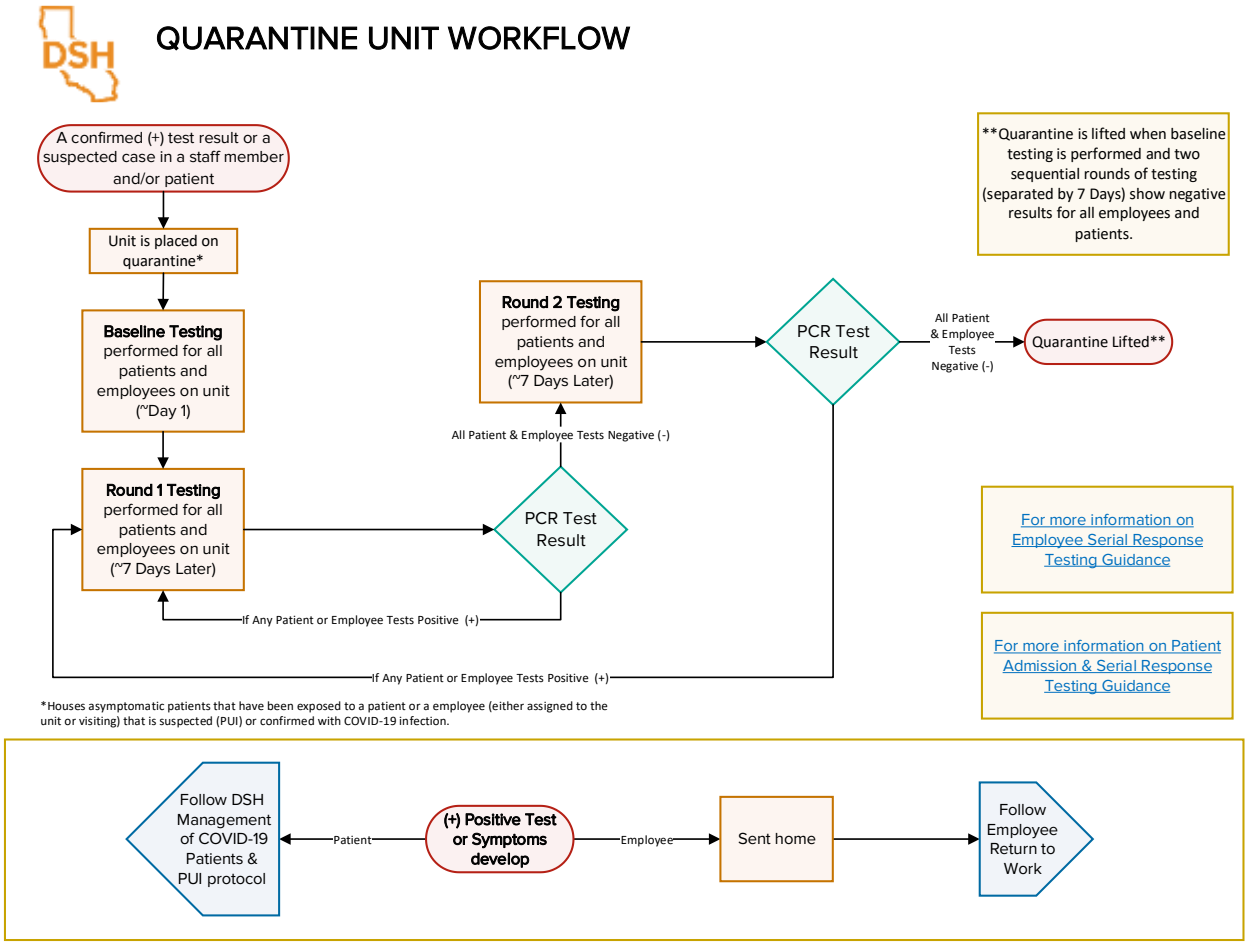
Quarantine units house patients that have been exposed to COVID-19 while receiving care in the hospital. A Quarantine Unit is activated when there is a PCR confirmed case or suspected COVID-19 patient and/or HCP. If a unit is quarantined due to contact with someone with suspected COVID-19 who is subsequently tested by PCR and receives a negative result, the unit can be released from quarantine and retesting should be considered. See Interim Guidance on Testing for SARS-CoV-2 in Correctional and Detention Facilities. All patients undergo serial response PCR testing at baseline, day 7 and day 14. If all patients test negative for all three tests the quarantine status is discontinued. If a patient has a positive PCR test result, the unit continues in quarantine which will be released when no new patient positive PCR test results are found for 2 consecutive rounds of testing, separated by 7 days and excluding baseline testing. Quarantine can be released based only on patient negative PCR test results and the absence of any new onset of illnesses among patients and/or employees (HCPs). If antigen testing is performed to assist in the immediate isolation of patients who exhibit symptoms of COVID-19 disease or if antigen testing is performed in asymptomatic patients during a hospital outbreak, confirmatory PCR testing is mandatory since antigen test results are presumptive.

Serial Response PCR testing for staff (HCP), staff who frequently visits patient care areas, Hospital Police Officers (HPO) and Correctional Officers when applicable, is performed every seven days until there are no new positive test results for 2 consecutive rounds of testing excluding baseline testing. If the hospital performed daily antigen testing of HCP (Please see section VI Healthcare Personnel (HCP) Screening) serial PCR testing is not required.

Table 2. PPE Required in Quarantine Units

REQUIRED PPE	REQUIRED PPE WHEN PROVIDING PATIENT CARE (LESS THAN 6 FEET APART)	AVAILABLE UPON REQUEST
• Surgical mask • Face Shield	• N-95 Respirator • Face Shield • Gloves	• Gown

Figure 2. Quarantine Unit Workflow



III. Isolation Unit Testing

Isolation units house patients confirmed to have COVID-19 disease. All patients have had a positive test result. Patient's transmission-based precautions are discontinued using a symptom-based or time-base strategy.

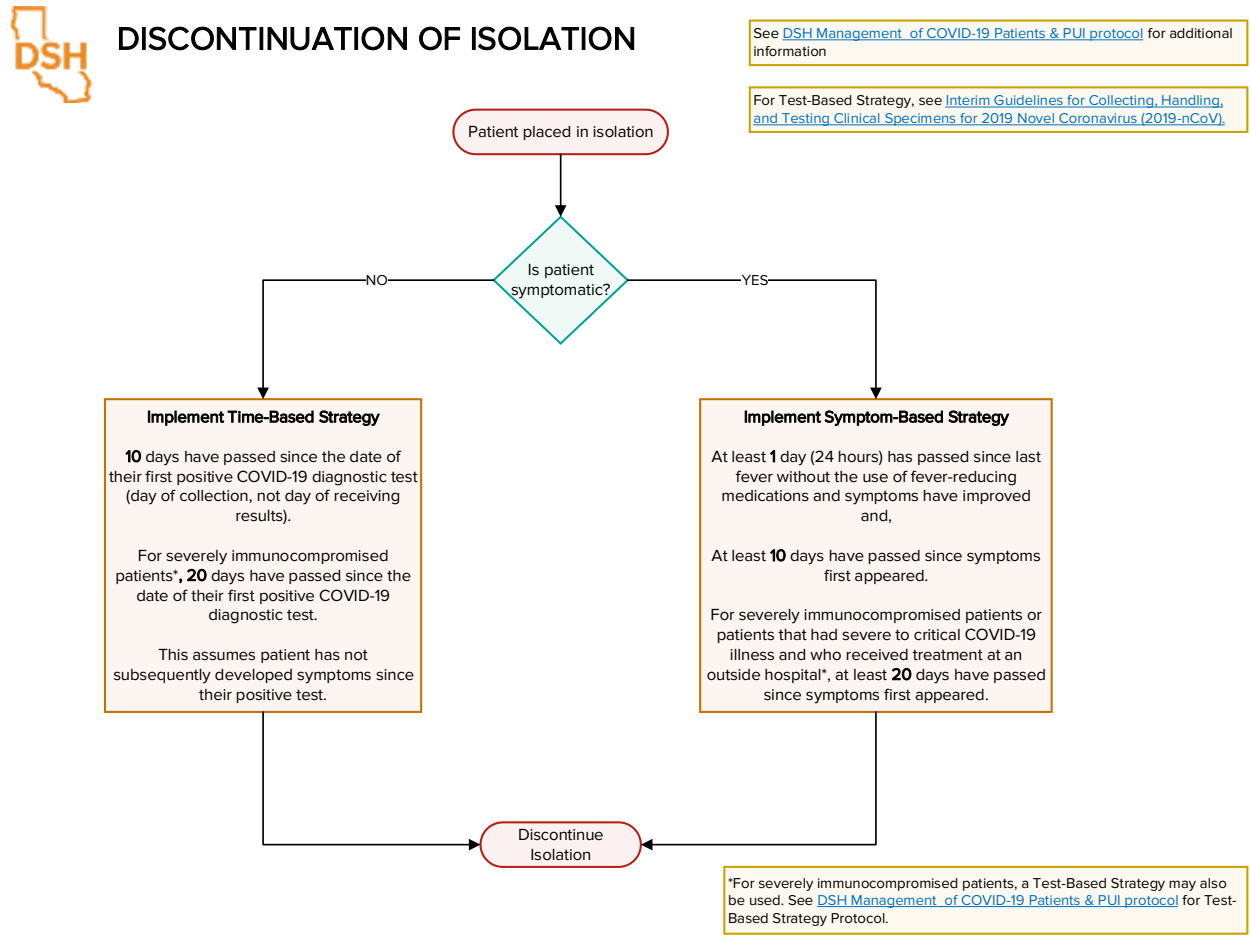
- *Symptom-based strategy:*
    - At least 1 day (24 hours) have passed *since last* fever without the use of fever-reducing medications, **and**
    - Symptoms consistent with COVID-19 disease (e.g. cough, shortness of breath, etc.) have improved, **and**
    - At least **10 days** have passed *since symptoms first appeared.*
        - ➢ *For severely immunocompromised patients or severely symptomatic patients, a time frame of **20 days** since symptoms first appeared is recommended after consultation with either the Chief Physician& Surgeon, the Medical Director or an ID specialist. In this situation a negative "Test-based Strategy" may also be used.*

- *Time-based strategy*.
    - **10 days** have passed since the date of their first positive COVID-19 diagnostic test, assuming they have not subsequently developed symptoms since their positive test.
        - ➢ *For severely immunocompromised patients, a time frame of **20 days** since the date of their first positive test is recommended after consultation with either the Chief Physician& Surgeon, the Medical Director or an ID specialist. In this situation a negative "Test-based Strategy" may also be used.*

Table 3. PPE Required in Isolation Units

REQUIRED PPE	REQUIRED PPE WHEN PROVIDING PATIENT CARE (LESS THAN 6 FEET APART)	AVAILABLE UPON REQUEST
• Surgical mask • Face Shield	• N-95 Respirator • Face Shield • Gloves	• Gown

Figure 3. Discontinuation of Isolation



IV. Surveillance/Screening Testing

The purpose of a surveillance/screening testing is to detect new cases, prevent exposure, and mitigate outbreaks. Congregate living has the potential for rapid and widespread transmission of COVID-19. A broader testing strategy is recommended to reduce the chance of a large outbreak when contact tracing is difficult to perform. This is especially relevant with COVID-19 since there is a high proportion of asymptomatic cases. DSH, in consultation with the California COVID-19 Testing Task Force and the California Department of Public Health's (CDPH) Healthcare Associated Infection (HAI) Program and has adopted a frequent surveillance/screening testing strategy. HCP testing is mandatory. If an HCP refuses to be tested, disciplinary action may be taken.

A. Daily Surveillance/Screening Staff Antigen Testing

- DSH performs daily surveillance/screening testing of HCP who provided direct patient care or who work in patient care areas. DSH uses the Abbott BinaxNOW Antigen Card for daily screening/surveillance of direct care staff. This also includes but is not limited to HCP providing transportation, environmental services, culinary/dietary services to the unit, Hospital Police Officers (HPO) and Correctional Officers (CO) that provide transportation and escort patients to outside community services. Staff not assigned to direct patient care areas are tested weekly by PCR.
- If a staff's BinaxNOW Antigen Card test result is presumptive positive for COVID-19 infection, the supervisor arranges for the staff to immediately leave the patient care area and the staff is tested by PCR. Employees will receive ATO for their entire shift on the day they are sent home due to positive screening.
- All BinaxNOW Antigen Card positive results are to be confirmed by PCR. The staff waits for their PCR results in community isolation.
- The staff works closely with the hospital during their absence from work. If the PCR results are negative the staff can return to work. If their result is positive for COVID19 the staff follows the Return-To-Work protocol included in this document and returns to work using a time-based or symptom-base strategy as discussed in Section VII.

B. Weekly Surveillance/Screening Staff PCR Testing

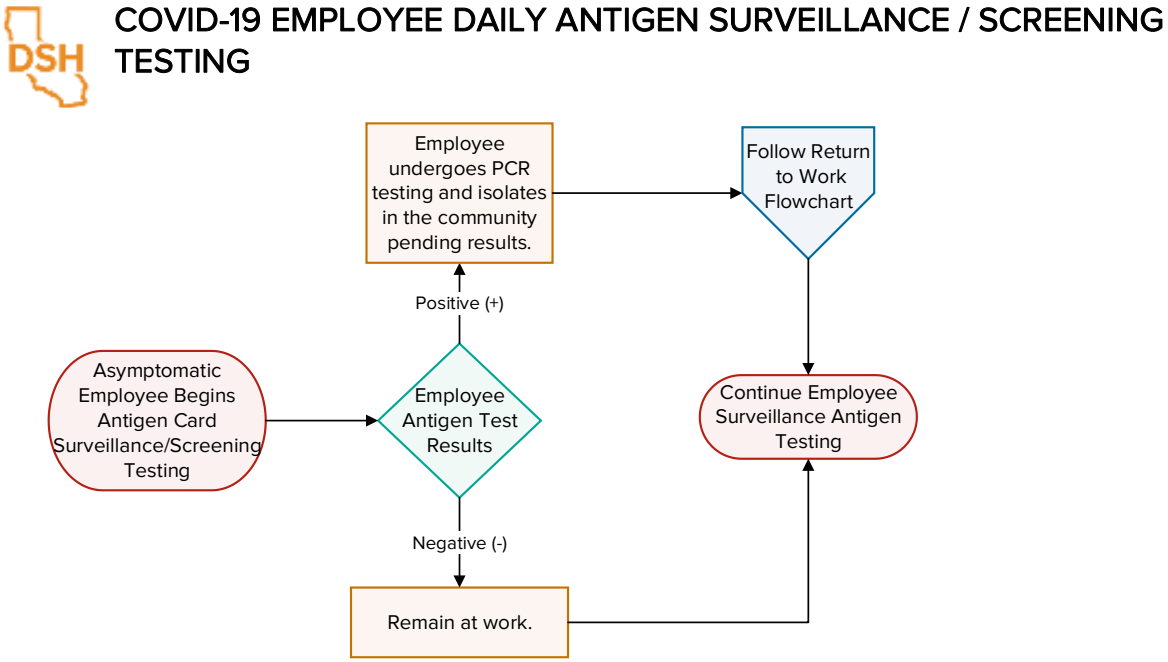
- Staff who are not assigned to direct patient care delivery are surveillance/screening tested on a weekly basis.

- If the PCR test result is negative, the staff continues working and is tested the following week.
- If the results are positive, the supervisor instructs the staff to immediately leave the hospital and to isolate in the community. Employees will receive ATO for their entire shift on the day they are sent home due to positive screening.
- The staff works closely with the hospital during their absence from work.
- The staff follows the Return-To-Work protocol included in this document and returns to work using a time-based or symptom-base strategy as discussed in Section VII.

C. Skilled Nursing Facilities Surveillance/Screening Staff testing
   - DSH follows all CDPH AFLs for surveillance/screening testing in SNF units.
   - SNF units follow DSH's Surveillance/Screening/Routine testing of staff as above.
   - SNF units test a random sample of 10% of all patients weekly.

D. If an HCP has recovered from COVID-19 disease, they do not participate in surveillance/screening or response testing for 3 months (90 days from release from isolation).

Figure 4. COVID-19 Employee Daily Antigen Surveillance/Screening Testing

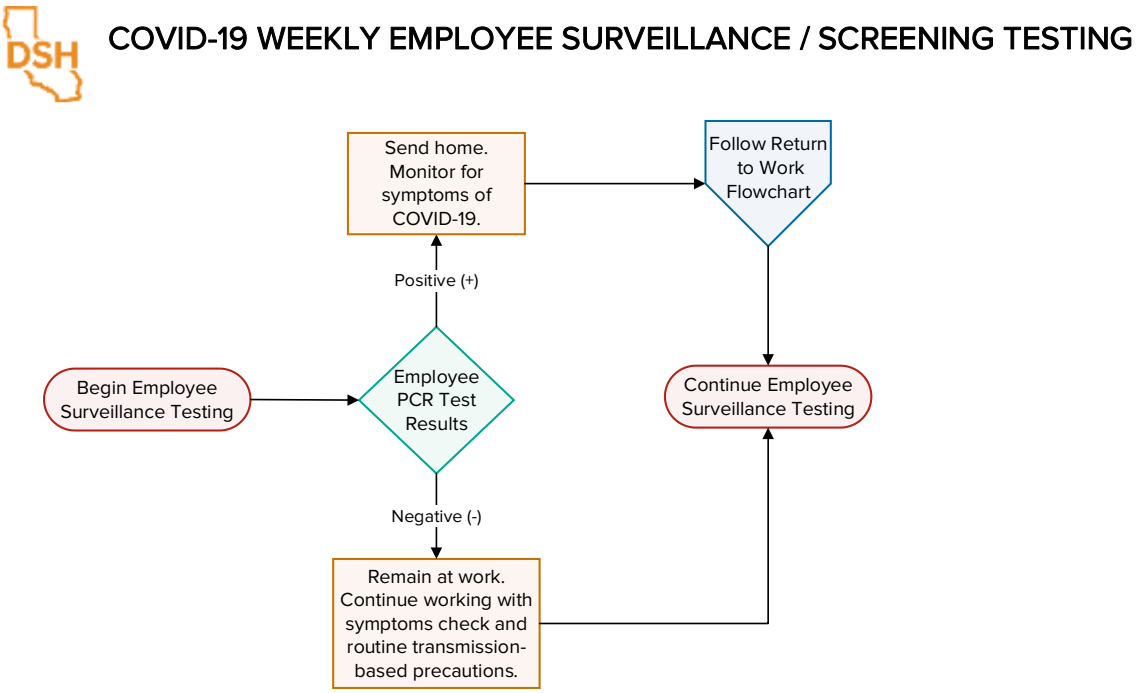


*For SNF units please see DSH SNF Testing and Surveillance

References:

- AFL-20-53 Corona Virus Disease 2019 (COVID-19) Mitigation Plan Recommendations for Testing of Health Care Personnel (HCP) and Residents at Skilled Nursing Facilities (SNF) 5/22/2020
- California Department of Public Health (CDPH) Hospital Acquired Infections (HAI)Team consultation.

Figure 5. COVID-19 Weekly Employee Surveillance/Screening Testing



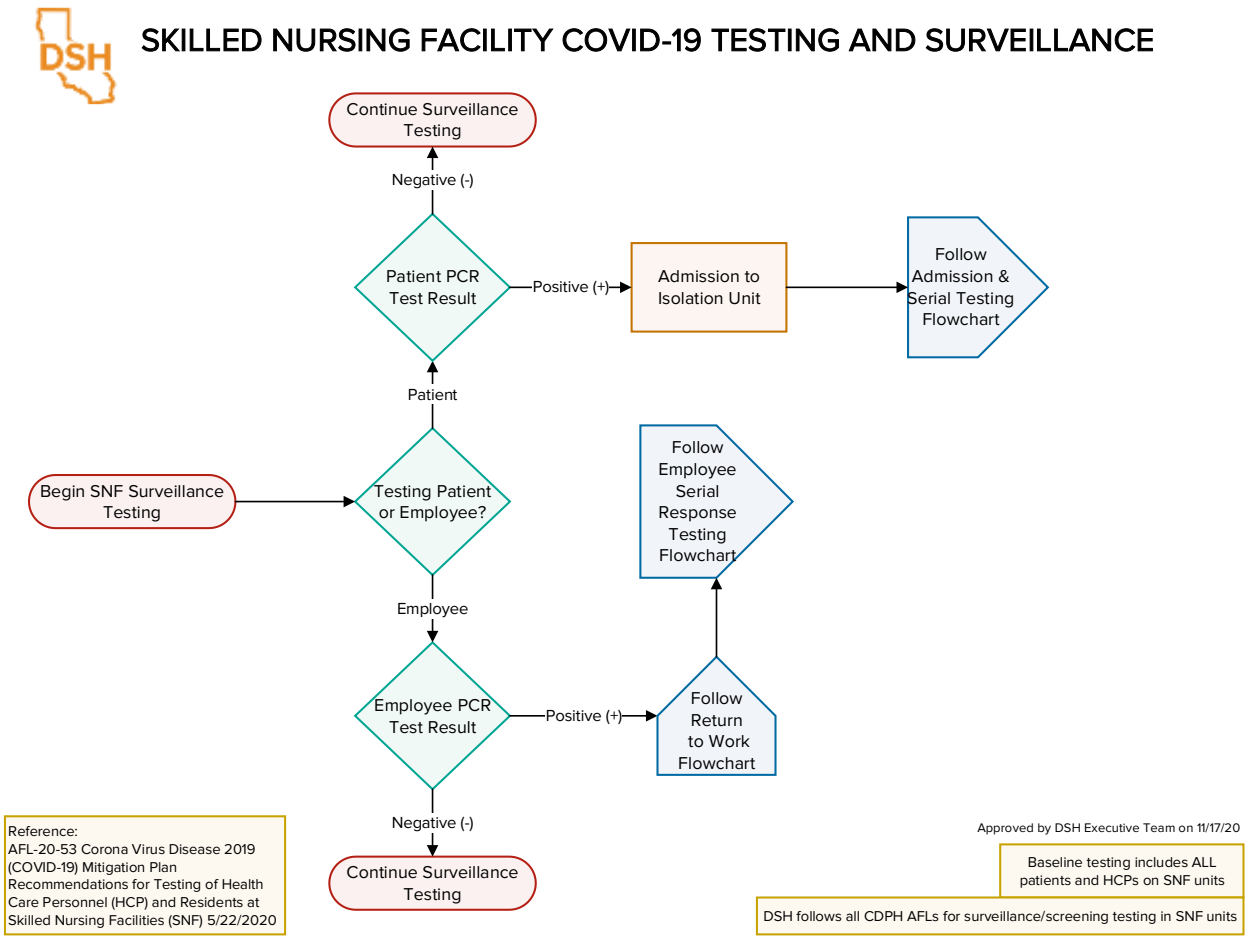
*For SNF units please see DSH SNF Testing and Surveillance

References:

- AFL-20-53 Corona Virus Disease 2019 (COVID-19) Mitigation Plan Recommendations for Testing of Health Care Personnel (HCP) and Residents at Skilled Nursing Facilities (SNF) 5/22/2020
- California Department of Public Health (CDPH) Hospital Acquired Infections (HAI)Team consultation.

Approved by DSH Executive Team on 11/17/2020

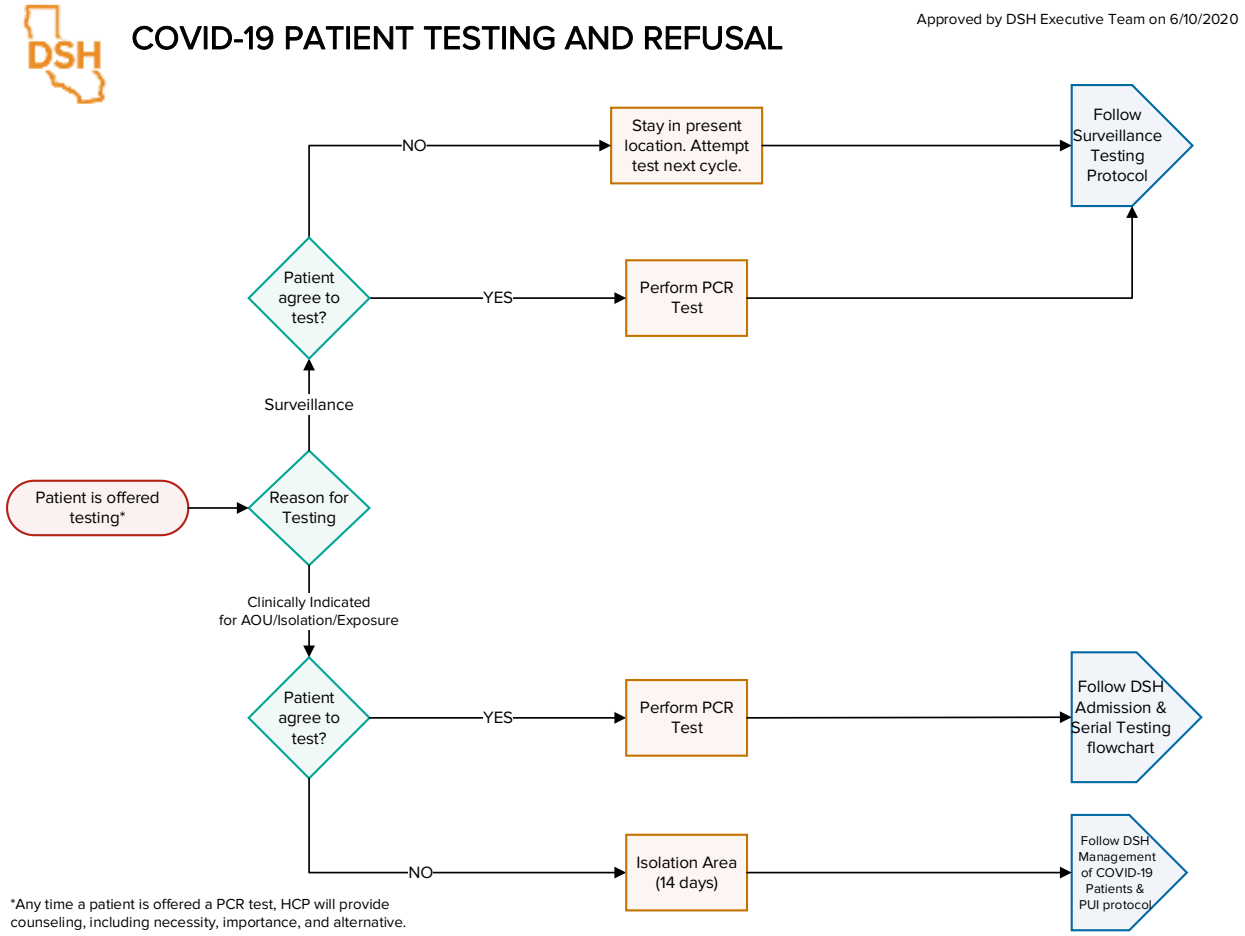
Figure 6. Skilled Nursing Facility COVID-19 Testing and Surveillance



V. Patient Testing Refusal

If a patient refuses testing, the HCP provides education and members of the treatment team develop a plan to incentivize the patient to participate in testing. Surveillance testing is voluntary for patients. If, despite of all efforts, the patient refuses to test during the admission process, while in quarantine or for response testing, the patient is placed in an isolation area for 14 days. For patients that are refusing testing in AOU, Quarantine Units and in isolation, testing is offered at least daily and is performed as soon as the patient agrees to test.

Figure 7. COVID-19 Patient Testing and Refusal



VI. Healthcare Personnel (HCP) Screening

All HCP undergoes COVID-19 screening prior to entering the care areas of the hospital. DSH HCP screening process consist of a primary screening and a secondary screening. Prior to entering the hospital, the primary screener takes the HCP's temperature and asks if in the last 14 days the HCP member has been in contact with an individual who has been diagnosed with COVID-19 and if the HCP is experiencing the flowing symptoms:

- Fever or chills
- Cough, dry or productive
- Dyspnea or difficulty breathing
- Fatigue
- Myalgia/muscle aches or body aches
- Headaches
- New loss of taste or smell
- Sore throat
- Nasal congestion or runny nose
- Nausea, vomiting and diarrhea

If the temperature of the HCP is equal or greater to 100°F or answered "Yes" to any of questions, the HCP undergoes secondary screening.

The secondary screening is performed by a RN. During the secondary screening process the HCP's temperature is taken again and more detailed questions are asked to determine if the HCP should be sent home or can proceed to enter the hospital and report to their assigned workspace.

During the secondary screening process, the RN confirms the symptoms and determines if the HCP had a prolonged close exposure to an individual with COVID-19 disease. The RN completes the DSH Secondary Screening Healthcare Personnel (HCP) Questionnaire. At the end of each shift all questionnaires are returned to the Public Health Office.

If an HCP is sent home, the RN provides to the HCP member DSH COVID-19 Positive Risk Screening Instruction Form. This form contains instructions on what are the steps for the HCP to take from home.

All HCP screeners, primary and secondary, undergo surveillance testing monthly.

Table 4. PPE Required for HCP Screeners

REQUIRED PPE	AVAILABLE UPON REQUEST
• Surgical mask • Face Shield • Gloves	• N-95 Respirator • Gown

VII. Return to Work

If an HCP tests positive for COVID-19 by PCR, they are sent home to follow a symptom-based or time-based strategy to return to work as recommended by the CDC. If an HCP develops symptoms consistent with COVID-19 disease, they follow a symptom-based strategy for return to work. If the HCP does not develop symptoms consistent with COVID-19, they follow a time-based strategy to return to work.

Figure 8. COVID-19 Employee Return to Work

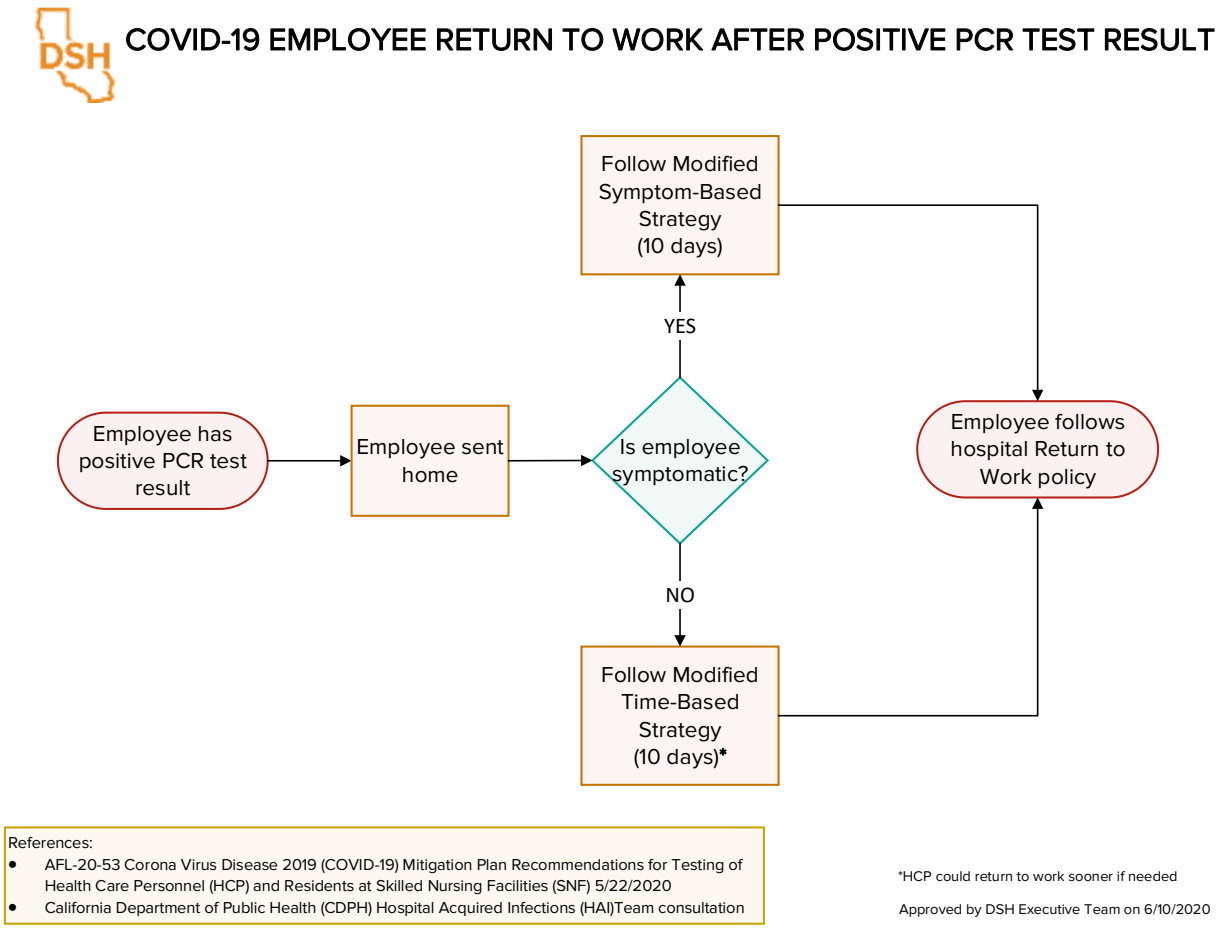
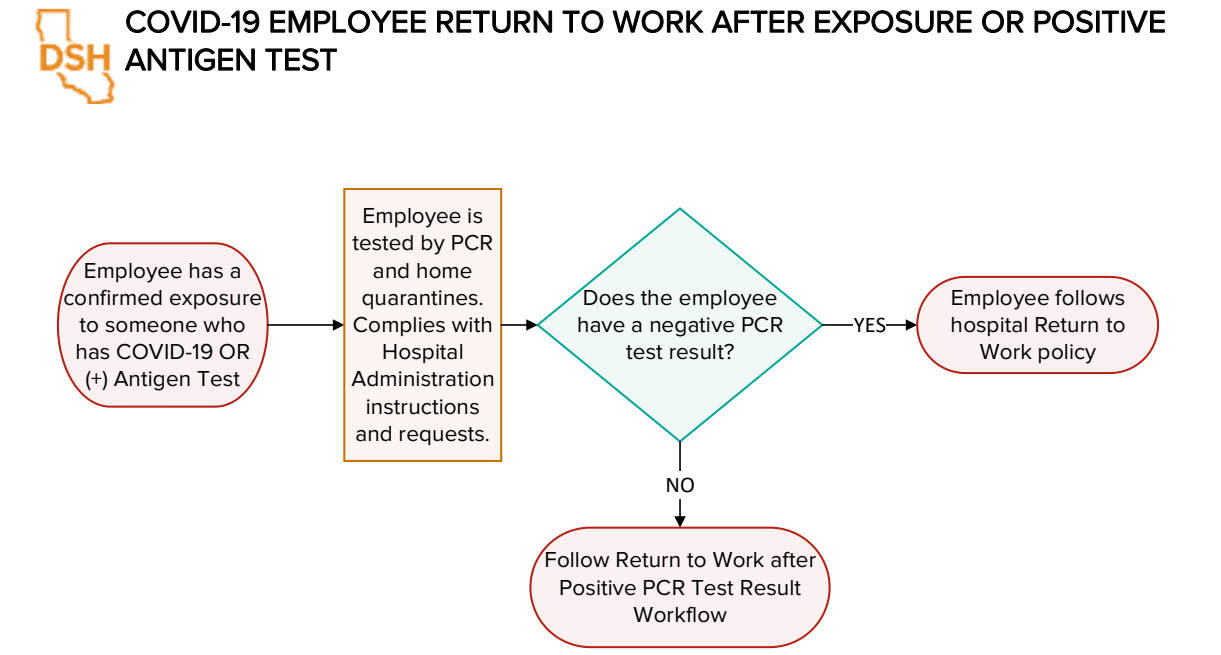


Figure 9. COVID-19 Employee Return to Work After Exposure or Positive Antigen Test



VIII. Influenza During the Pandemic and the COVID-19 Rapid Antigen Test

This guidance is developed based on CDC recommendations to address the combined risk faced by patients and staff during the upcoming flu season and ongoing COVID-19 pandemic. While more is learned daily, there is still a lot that is unknown about COVID-19 disease and the virus that causes it. CDC recommendations and this Guidance may change in the future as more information about COVID-19 becomes available.

Please refer to the **DSH CLINICAL GUIDANCE INFLUENZA PREVENTION AND CONTROL DURING THE COVID-19 PANDEMIC** for more detail information.

The following recommendations are also applicable to other respiratory infections besides COVID-19 and Flu such as Respiratory Syncytial Virus (RSV), Strep Throat and others.

Influenza (Flu) and COVID-19 are contagious respiratory illnesses caused by different viruses. COVID-19 is caused by infection with a new coronavirus (SARS-CoV-2) and flu is caused by infection with influenza viruses.

It is possible to be infected with the flu, as well as other respiratory illnesses and COVID-19 at the same time. Health experts are studying how common this can be. Flu and COVID-19 share many characteristics including similar symptoms; it may be hard to tell the difference between both infections based on symptoms alone, and **TESTING MAY BE NEEDED TO HELP CONFIRM A DIAGNOSIS.** Diagnostic testing can help Health Care Providers (HCP) to determine if a patient is sick with flu or similar respiratory infections, and/or COVID-19. More information about clinical similarities and the differences between Flu and COVID-19 are provided in the following Weblinks:

https://www.cdc.gov/flu/symptoms/flu-vs-covid19.htm#

https://www.cdc.gov/flu/symptoms/testing.htm

Utilize the laboratories available in your hospital to perform the necessary COVID-19, Influenza A/B and Respiratory Syncytial Virus (RSV) tests in compliance with CDC guidance.

Patients who present with symptoms consistent with COVID-19 disease and other respiratory infections require isolation until COVID-19 diagnostic testing is performed and COVID-19 is confirmed or ruled out. Patient can be infected with COVID-19 and other respiratory viruses such as Influenza and RSV at the same time.

California Department of Public Health (CDPH) recommends that congregate living setting develop plans to quickly diagnosis, isolate and treat Influenza considering the current SARs CoV2 Pandemic. In high risk setting as in the DSH-Hospitals, once influenza

is circulating in the community, it will be important to rapidly test for both flu and SARS-CoV-2 whenever anyone presents with respiratory tract signs and probably G.I. tract symptoms/signs.

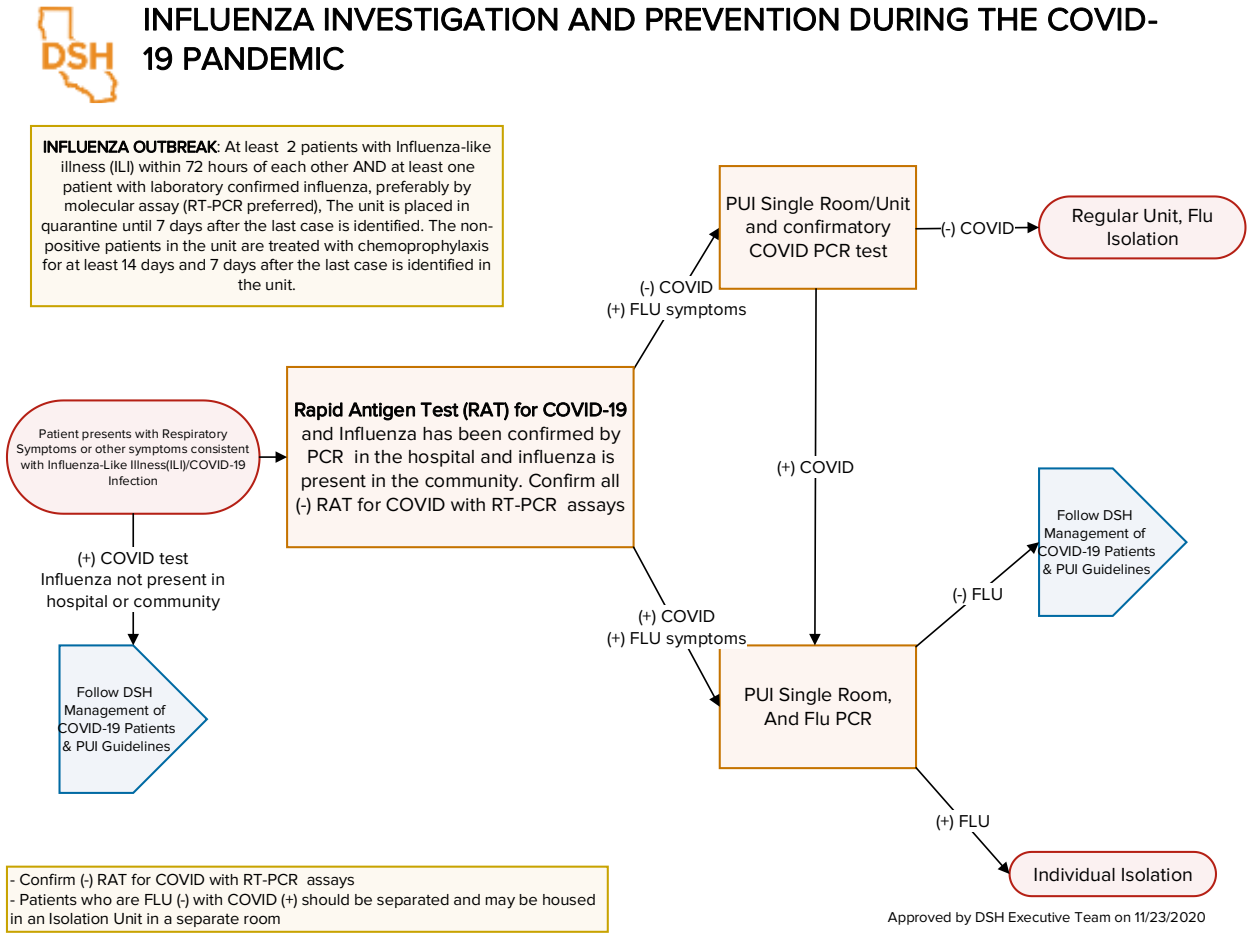
The symptoms of influenza and Covid-19 overlap. An individual infected with either Influenza viruses or SARS CoV2 virus can present with fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills and/or fatigue. Viral assays are important to aid the diagnostic process because it is very difficult to determine the source of the infection by only clinical symptoms.

Infections with Influenza and SARS- CoV2 are important to diagnose quickly because:

1) Both infectious diseases can spread rapidly in congregate living settings,
2) The decision to isolate a patient with both Covid-19 and Influenza is very important and patients with one illness should not be isolated in the same location as patients with the other illness.
3) Patients co-infected with Influenza (A or B) virus AND SARSCoV2 should be isolated separate from patient infected with either SARS CoV2 virus OR Influenza virus to decrease risk of co infection to the whole population.
4) A co-infection with both Covid-19 and Influenza viruses leads to 5.92 times the mortality than in a patient without either viral infection.
5) Influenza A and B viral infections have several pharmacological treatment options, all of which work best if initiated within 48 hours of diagnosis.
6) While there is no definitive prophylaxis to prevent Covid-19 infection, the CDC recommends chemoprophylaxis for any patient who has contact with an individual known to have been infected with Influenza regardless of Influenza vaccination status.
7) While Influenza viral testing is not required to make a clinical diagnosis of Influenza in the setting of an Influenza outbreak, the distinction between Influenza and SARS- CoV2 in the time of a Corona virus pandemic is critical.
8) Multiple commercial molecular assays are available for the diagnosis of both Influenza and SARS-Cov2, and the faster a positive test can be returned, the faster the response to an outbreak in a high-risk clinical setting.
9) Rapid antigen tests can return results in a fast as 15 minutes and can be done at the point of care, while Rt-PCR assays require a CLIA approved laboratory and typically return in 24-48 hours (if available test reagents and lab support are available). A 24-48 hours TAT cannot be guaranteed specially during time of increasing wide spread of C-19 or influenza and increasing the demands for testing and reporting of results.
10) The use of a rapid antigen testing for both Influenza and SARS CoV2 is not meant to replace the use of RT-PCR as gold standard diagnosis of SARs-CoV2 but can

be additive in the clinical decision tree of diagnosis and treatment. All rapid antigen tests should be confirmed by RT-PCR test results.

Figure 10. Influenza Investigation and Prevention During the COVID-19 Pandemic



IX. COVID-19 Units/Processes and Personal Protective Equipment (PPE) Summary

Table 5. COVID-19 Units/Processes and Personal Protective Equipment (PPE) Summary

UNIT TYPE or PROCESS	REQUIRED PPE	REQUIRED PPE WHEN PROVIDING DIRECT PATIENT CARE (less than 6 feet apart)	AVAILABLE UPON REQUEST
Isolation Unit: Separates COVID-19 (+) patients from people who are not sick.	• Surgical mask • Face Shield	• N95 respirator • Face Shield • Gloves	• Gown
PUI Room(s): Houses patients in individual rooms that have symptoms consistent with COVID-19 disease who are not confirmed to be infected. If the patient tests (+) they are moved to an Isolation Unit. If the patient tests (-) they continue to have serial testing. The patients can be moved to a regular unit if asymptomatic and test results are negative at DAY 1 (baseline) and two consecutive rounds of testing separated by 7 days (Example: DAY 7 and DAY 14 or DAY 14 and DAY 21)	• Surgical mask • Face Shield	• N95 respirator • Face Shield • Gloves	• Gown

UNIT TYPE or PROCESS	REQUIRED PPE	REQUIRED PPE WHEN PROVIDING DIRECT PATIENT CARE (less than 6 feet apart)	AVAILABLE UPON REQUEST
Admissions Observation Unit: Houses patients arriving to the hospital for admission and in certain circumstances patients arriving from receiving outside care/services. Upon arrival at the hospital all patients are screened and tested (DAY 1) for COVID-19 disease. Patients are triaged according to their known exposure risk and symptoms. Patients are cohorted and undergo serial testing together. If symptoms consistent with COVID-19 are present, the patient is housed in a PUI room or Isolation Unit. The patients can be moved to a regular unit if asymptomatic and test results are negative at DAY 1 (baseline) and two consecutive rounds of testing separated by 7 days (Example: DAY 7 and DAY 14 or DAY 14 and DAY 21)	• Surgical mask • Face Shield	• N-95 respirator • Face Shield • Gloves	• Gown

UNIT TYPE or PROCESS	REQUIRED PPE	REQUIRED PPE WHEN PROVIDING DIRECT PATIENT CARE (less than 6 feet apart)	AVAILABLE UPON REQUEST
Quarantine Unit: Houses asymptomatic patients that have been exposed to a patient or a staff (either assigned to the unit or visiting) that is suspected (PUI) or confirmed with COVID-19 infection. Patients are monitored closely for development of symptoms consistent with COVID-19 disease. If all patients continue to be asymptomatic and test results are negative at DAY 1 (baseline) and two consecutive rounds of testing separated by 7 days (Example: DAY 7 and DAY 14 or DAY 14 and DAY 21) the unit can be released from quarantine.	• Surgical mask • Face Shield	• N95 respirator • Face Shield • Gloves	• Gown
Regular Unit: Unit that has not been placed on quarantine and does not have patients being treated, under investigation, or being observed for COVID-19.	• Surgical mask • Face Shield	• Surgical mask • Face Shield • Gloves	• Face Shield
HCP Screening Process	• Surgical mask • Face Shield • Gloves	N/A	• N-95 • Gown

UNIT TYPE or PROCESS	REQUIRED PPE	REQUIRED PPE WHEN PROVIDING DIRECT PATIENT CARE (less than 6 feet apart)	AVAILABLE UPON REQUEST
CPR/ACLS	• N-95 respirator • Face Shield • Gloves • Gown	N/A	
High Risk Procedures: COVID testing, blood draw	• N-95 respirator • Face Shield • Gloves • Gown	N/A	
Transportation Staff: Any staff assigned to transport or escort a COVID+ patient or PUI in a vehicle (Example: To OMF appointments or on bus between compounds).	• N-95 respirator • Face Shield • Gloves • Gown	N/A	
Administrative or Non-Treatment Areas Located Outside the STA With No Patient Contact: Staff or visitors to offices and departments on grounds but outside secured treatment area.	• Personal cloth face coverings are allowed, or • Surgical mask	N/A	